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EXAMINER

BUTLER, DOUGLAS C

| ART UNIT | PAPER NUMBER |
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3683

DATE MAILED: 09/09/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/073,399

Applicant(s)

RIVIN, EVGENY I.

Examiner

Douglas C. Butler

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 July 2004.
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 3-7,9-12 and 14 is/are pending in the application.
4a) Of the above claim(s) 3-6 is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 7,9-12,14 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1, 2, 8, 13 have been canceled.

2. Claim 7 depends on canceled claim 13.

3. Applicant has elected Species D (Fig. 12) for prosecution without traverse.

Claims 3-6 are withdrawn from consideration as not being readable on the elected species. 37CFR 1.142(b).

4. An action on the merits of claim 10 and its dependent claims 9, 11, 12 and 14 is included in this office action.

5. Claim 10 is directed to a bushing including inner and outer sleeves with a rubber insert between the sleeves which bushing is preloaded in the radial direction. The combination is notoriously old despite nine pages of arguments from applicant to the contrary. As to the feature using "streamlined rubber elements", applicant's specification does not define streamlined so as to negate the applicability of the applied references. As indicated on page 3, paragraph 7 of the office action of March 26, 2004, applicant states that "streamlined" includes a variety of shapes such as a cylinder, torus, o-ring, sphere. Applicant's own words make it clear that the term "streamlined" is not limiting in any patentable sense. See page 3 of the specification and the Abstract. The term is thus interpreted as broadly as reasonably possible without limiting the term by attributing a special meaning which is not supported by applicant's own words.

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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7. Claim 7 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 7 is incomplete since it depends on canceled claim 13.

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

9. Claims 10, 11, 12 are rejected under 35 U.S.C. 102(b) as being anticipated by Werdich (4966386), of record.

Fig. 1 of Werdich (386) discloses a bushing with a rigid inner sleeve 2, outer sleeve 5 coaxial with the inner sleeve 2, streamlined rubber elements 4 wherein the stiffness constant of the rubber elements 4 is changed by radial preloading in compression. See column 4, lines 4-15 of Werdich.

Applicant's arguments directed to Werdich have been considered but are not convincing in that the "squeezing" of the streamlined rubber elements 4 of Fig. 1 of Werdich is radial pre-loading as broadly claimed.

10. Claims 10, 11 and 12 are rejected under 35 U.S.C. 102(b) as being anticipated by Schwerdt (5,096,166), of record.

See column 1, lines 54-56 of Schwerdt wherein Schwerdt teaches changing the stiffness constants by compression preloading in the radial direction as well varying stiffness in other directions by preloading. Note streamlined elements 9, 11 with inner (1) and outer (3) sleeves.

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Applicants argues that the elements 9, 11 of Schwerdt are not streamlined. The examiner disagrees in that applicant fails to set forth a clear definition in the instant specification of the term "streamlined". Applicant does provide examples of what "streamlined" conveys but exemplification is not an explicit definition. The claim language is interpreted as broadly as their terms reasonably permit. Note that the examiner has interpreted the term "streamlined" consistent with applicant's broad-sweeping examples.

11. Claims 10-12 are rejected under 35 U.S.C. 102(b) as being anticipated by Schwerdt (5,031,885), of record.

The streamlined bodies 4 of Schwerdt (885) are clearly preloaded. Note the bowed nature of the elements.

12. Claims 10, 9, 11, 12 and 14 are rejected under 35 U.S.C. 102(b) as being anticipated by CH196108 to Auto Union, of record.

Note pre-load application shoes at 5 of Figs. 1, 5, 6, 7 of Auto Union with inner (3) and outer (4) sleeves.

Applicant argues that bolts 5 of CH 196108 are not adjustable to thus pre-load the streamlined rubber elements 2. Clearly, the bolts have hexagonal nuts permitting adjustment.

13. Claims 10, 11 and 12 are rejected under 35 U.S.C. 102(b) as being anticipated by JP 60-85918 to Miura et al, of record.

Fig. 5 of Miura et al discloses a plurality of streamlined rubber elements 23 between sleeves 29, 13 with stiffness changing means 25, 33 for preloading.

Bushing or sleeve 13, 29 is capable of being pre-loaded as broadly recited.

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14. Claim 10 is rejected under 35 U.S.C. 102(b) as being anticipated by Kingsley (6,082,721), of record.

Kingsley discloses changing the stiffness of a streamlined element 24 by preloading in the radial direction as per column 6, lines 32-63.

Applicant argues that sleeve 24 of Kingsley is not streamlined. Again, applicant does not define "streamlined" in the instant specification but merely gives examples of what a "streamlined" element may be by referring to cylinders, spheres, o-rings, etc. Exemplification does not convey a special definition.

15. Claim 10 is rejected under 35 U.S.C. 102(b) as being anticipated by Kubaugh (2,459,741), of record.

Note radial pre-loading means 30, 42 of Figs. 4-5 of Kubaugh. The elements 12 are streamlined as broadly recited.

16. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

17. Claims 9, 10-12 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schell (3,202,410) or Rivin (5,934,653) in view of any one of the secondary references to Rosenzweig (1734596) or Masury (1621676) or Gray (4403784) or Kubaugh (2459741), all of record.

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Each one of the principal references discloses a plurality of streamlined rubber elements between sleeves but without the preloading means claimed in claim 10, last two lines.

Re Kubaugh, note preload means 30, 42 of Figs. 4, 5, respectively.

Rosenzweig (596) discloses preload or prestress means 37, 37', 50 of Figs. 1-7. Note the numerous preload means and their locations in Figs. 1-2 with Gray disclosing radial pre-loaders 50A, 50B in Fig. 4.

It would have been obvious at the time the invention was made to one having ordinary skill in the art to which the invention pertains to radially preload the bushings of Schell and Rivin (653) as taught by each of the secondary references with the number and position selected so as to provide the bushing user with the spring stiffness characteristics as desired based upon the particular environment intended to be used such as the automotive steering and suspension technologies, linkage arts, vibration isolation and dampening arts, jet engine, aircraft wing, vehicle underbody arts, etc. Bushings are used in technologies too numerous to mention.

Applicant argues that there is not possibility of adjustment in his previous patent (5934653) or Schnell (3202410). Note that it has been held within the ability of an artisan in the art to provide a known device so as to be adjustable. See MPEP 2144.04 which refers to In re Stevens, 101 USPQ 284 (CCPA 1954).

The claims are interpreted in light of the specification without reading limitations into of the claims. Claim 10 calls for little more than a bushing with a piece of rubber.

18. Claims 9-12 and 14 are rejected under 35 U.S.C. 102(b) as being anticipated by Rosenzweig (596) or Masury (676), both of record.

See Figs. 1-7 of Rosenzweig and Figs. 1-2 of Masury.

19. Claim 10 is rejected under 35 U.S.C. 102(b) as being anticipated by Pierce (5,413,374), of record.

Applicant states that Pierce lacks any type of stiffness adjustment. Clearly, Pierce discloses an adjustable bushing with means (slit 26 and 28) for changing the stiffness of streamlined rubber element 22 by preloading in the radial direction.

20. Claim 10 is rejected under 35 U.S.C. 102(b) as being anticipated by Thorn (4,899,997), of record.

Bushing 10 of Figs. 1-2 of Thorn discloses streamlined element 26 with a stiffness that is changeable based upon radial preloading element 42 as per column 5, lines 45-66 and the last lines of the Abstract thereof.

21. Applicant's arguments have been carefully considered but are not convincing for the above reasons.

22. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

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23. Any inquiry concerning this communication should be directed to Exmr. Butler at telephone number 703-308-2575.



DOUGLAS C. BUTLER
PRIMARY EXAMINER

9/4/2004

AV3683

Butler/vs
August 30, 2004